



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,490	12/30/2004	Eiichi Kameda	2004-2018A	5405
513 7590 12/29/2006 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			EXAMINER BLACKWELL, GWENDOLYN ANNETTE	
			ART UNIT 1775	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	12/29/2006	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,490	KAMEDA, EIICHI	
	Examiner	Art Unit	
	Gwendolyn Blackwell	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 October 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 18-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 18-20 and 22-24 is/are rejected.
- 7) Claim(s) 21, 25 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Examiner's Comment

1. In view of Applicant's claim amendments set forth in the response dated October 2, 2006, the interpretation of claim 1 under 35 USC 112, 6th paragraph, means plus function, is no longer applicable as Applicant has amended the claim to provide sufficient structure for the means for preventing an inflection point. Thus, if the phrase "means for" or "step for" is modified by sufficient structure, material or acts for achieving the specified function, the USPTO will not apply 35 U.S.C. 112, sixth paragraph, until such modifying language is deleted from the claim limitation. *MPEP 2181.*

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 18-20 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 5,644,124, Hamada et al.

Regarding claim 18

Hamada et al disclose a multilayered filter (ray cut filter) formed on a light receiving substrate (transparent plate) comprised of alternating layers of high and low refractive index materials, (column 3, lines 4-57). Figure 3 demonstrates that the optical thickness of the high

Art Unit: 1775

and low refractive index layer increases from the substrate and up through the multilayered stack, (column 7, lines 43-65), wherein the optical film thickness of the low and high refractive index thin films can be the same (Figure 3, layers 28/29), yet have a different thickness from each layer, (layer 10/11 vs. layer 12/13), (Figure 3). Between the substrate and the multilayer stack, a matching layer C (adjustment layer) is formed, (Figure 3). Also note, that in Figure 3, low refractive layers 2 and 30 have an optical thickness of $\lambda/8$ (adjustment layers) which is different from those of the other layers located between layers 2 and 30. As the layer structure of Hamada et al is the same as that set forth in pending claim 18, the limitations of the multilayer film providing a sharpness prevention means is present in the prior art. Absent an evidentiary showing to the contrary, the addition of the physical limitations does not provide a patentable distinction over the prior art of record, meeting the limitations of claim 18.

Regarding claims 19-20 and 22-24

Figure 3 also demonstrates at least first (layers 13/14), second (layers 26/27), and third layers (layers 28/29), which increase in thickness as the distance from the substrate is increased. The thin film layer thicknesses of the first and second layers are substantially the same as well as the thin film layer thicknesses of the first and third layers, meeting the limitations of claims 19-20 and 22-24.

Allowable Subject Matter

4. Claims 21 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1775

The closest prior art of record while generally teaching the layer structure and thickness limitations does not teach or suggest that the filter should have a filter on one side of the substrate in the wavelength band from the visible region to the infrared region with an additional filter on the other side of the substrate going from the UV region to the visible region.

Response to Arguments

5. Applicant's arguments filed October 2, 2006 have been fully considered but they are not persuasive.

6. Applicant contends (1) that the structure of the presently claimed invention is not taught or suggested by Hamada (US 5,644,124), (2) that the function required by the claim is not found in Hamada, and (3) that matching layer C of Hamada is not the same as Applicant's adjustment layer.

7. Applicant's contention (1) is not persuasive as Hamada does teach and suggest the layer structure and the corresponding thickness requirements as set forth above. In particular, Figure 3 demonstrates that the optical thickness of the high and low refractive index layer increases from the substrate and up through the multilayered stack, (column 7, lines 43-65), wherein the optical film thickness of the low and high refractive index thin films can be the same (Figure 3, layers 28/29), yet having a different thickness from each layer, (layer 10/11 vs. layer 12/13), (Figure 3).

Applicant's contention (2) is not persuasive Applicant has not demonstrated that the filter of Hamada does not provide a sharpness prevention means. The filter of Hamada prevents unnecessary light from becoming incident on any region except the light receiving portion and has good spectral sensitivity characteristics while passing light in a predetermined wavelength

Art Unit: 1775

band, (columns 2-3, lines 67-16). As the filter of Hamada passes light in a predetermined wavelength, meets the high and low refractive index layers, and meets the thickness limitations of the claimed invention, it would be expected that the filter of Hamada would also meet the sharpness prevention limitations of the claimed invention absent an evidentiary showing to the contrary. For further clarification, is the sharpness prevention means relating to a sharp change noticeable by the naked eye or a change that requires a machine or other apparatus to detect?

Applicant's contention (3) is not persuasive as Applicant has not clearly defined the adjustment layer in a way that would define over the matching layer C or the low refractive index layers 2 and 30, which enclose layers 3-29. Absent further clarification, the low refractive index layers and the matching layer C will be taken as the equivalent of Applicant's claimed adjustment layer.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn Blackwell whose telephone number is (571) 272-1533. The examiner can normally be reached on Monday - Thursday; 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gwendolyn Blackwell
Examiner
Art Unit 1775


JENNIFER MCNEIL
SUPERVISORY PATENT EXAMINER
12/20/06